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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,281	03/21/2006	Angelo Gactani	4017-43	5700
23117 7590 10/14/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
STABLEY, MICHAEL R				
ART UNIT		PAPER NUMBER		
3611				
MAIL DATE		DELIVERY MODE		
10/14/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/566,281

**Applicant(s)**

GAETANI, ANGELO

**Examiner**

Michael R. Stabley

**Art Unit**

3611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-34 and 38-47 is/are rejected.
- 7) ☒ Claim(s) 35-37 and 48-54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/30/06
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 29-37 and 39-54 objected to because of the following informalities:  
Claims dependent upon cancelled claims. Application was reviewed as follows: claims 29-35 depending upon 28, claim 36 upon 35, claim 37 upon 36, claims 39-44 and 49 upon 38, claims 45-47 upon 44, claim 48 upon 47, claims 50 and 52 upon 49, claim 51 and 54 upon 50, and claim 53 upon 52. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 28-32, 38-44, and 47 rejected under 35 U.S.C. 102(b) as being anticipated by Honjo (U.S. 4,683,973).

In re claim 28, Honjo discloses a steering apparatus for steering wheels (12) of a vehicle, comprising support means (20) arranged for supporting said wheels, driving means (M) arranged for rotating said support means around respective longitudinal axis means and connecting means arranged for connecting said driving means with said support means, said connecting means comprising transmission gear means which comprises gear wheel means (26) associated with said support means and further gear wheel means (14) connected with said driving means and engaging with said gear

wheel means, wherein said further gear wheel means has a pitch diameter greater than the pitch diameter of said gear wheel means as shown in Figure 1.

In re claim 29, Honjo further discloses wherein said gear wheel means and said further gear wheel means have respective axes of rotation mutually parallel as shown in Figure 1.

In re claim 30, Honjo further discloses wherein said gear wheel means and said further gear wheel means have respective axes of rotation mutually concurrent.

In re claim 31, Honjo further discloses wherein said gear wheel means and said further gear wheel means have respective axes of rotation mutually non- intersecting.

In re claim 32, Honjo further discloses wherein said further gear wheel means comprises a sector gear as shown in Figures 4 and 5.

In re claim 38, Honjo discloses a vehicle comprising steering wheel means (12) and steering means arranged for controlling said steering wheel means, said steering means comprising support means arranged for supporting said steering wheel means, driving means arranged for rotating said support means around respective longitudinal axis means and connecting means arranged for connecting said driving means with said support means, said connecting means comprising transmission gear means which comprises gear wheel means associated with said support means, and further gear wheel means connected with said driving means and engaging with said gear wheel means, wherein said further gear wheel means has a pitch diameter greater than the pitch diameter of said gear wheel means as shown in Figures 1 and 3.

In re claim 39, Honjo further discloses wherein said gear wheel means and said further gear wheel means have respective axes of rotation mutually parallel.

In re claim 40, Honjo further discloses wherein said gear wheel means and said further gear wheel means have respective axes of rotation mutually concurrent.

In re claim 41, Honjo further discloses wherein said gear wheel means and said further gear wheel means have respective axes of rotation non-intersecting.

In re claim 42, Honjo further discloses wherein said further gear wheel means comprises a sector gear.

In re claim 43, Honjo further discloses wherein said steering wheel means comprises a first steering wheel and a second steering wheel.

In re claim 44, Honjo further discloses wherein said driving means comprises motor means (M).

In re claim 47, Honjo further discloses wherein said motor means comprises a first motor (M1) associated with said first steering wheel and a second motor (M2) associated with said second steering wheel.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 33, 34, 45, and 46 rejected under 35 U.S.C. 103(a) as being unpatentable over Honjo.

In re claims 33, 34, and 45, 46, Honjo discloses the apparatuses of claims 28 and 44, respectively wherein said driving means (M) comprises a motor means, but does not specifically disclose an electric or hydraulic means. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use either an electric or hydraulic motor means since it was known in the art that either kind of motor could be used to drive such a steering apparatus.

***Allowable Subject Matter***

6. Claims 35-37 and 49-54 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The specific limitations of "wherein said driving means comprises actuator means" in the combination as claimed in claims 35 and 49 is not anticipated or made obvious by the prior art of record in the examiner's opinion.

7. Claim 48 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The specific limitations of "further comprising electronic command and control

means arranged for actuating said first motor and said second motor so as to coordinate the relative rotation of said first steering wheel and said second steering wheel" in the combination as claimed in claim 47 is not anticipated or made obvious by the prior art of record in the examiner's opinion.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Stabley whose telephone number is (571)270-3249. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Michael R Stabley/  
Examiner, Art Unit 3611

/Paul N. Dickson/  
Supervisory Patent Examiner, Art Unit 3600